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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,111	03/19/2004	Fabio R. Maino	ANDIP041/9026	8499

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EXAMINER
HENEGHAN, MATTHEW E

ART UNIT	PAPER NUMBER
2134	

MAIL DATE	DELIVERY MODE
05/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/805,111	MAINO ET AL.
	Examiner	Art Unit	
	Matthew Heneghan	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *12 March 2007*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on *12 March 2007* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/9/07*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   In response to the previous office action, Applicant has amended claim 15.

Claims 1-19 have been examined.

Information Disclosure Statement

2.   The following Information Disclosure Statement in the instant application has

been fully considered:

   IDS filed 9 April 2007.

Drawings

3.   The drawings were received on 12 March 2007. These drawings are acceptable.

Terminal Disclaimer

4.   The terminal disclaimer filed on 12 March 2007 disclaiming the terminal portion of

any patent granted on this application which would extend beyond the expiration date of

U.S. Patent Application No. 10/034,367 has been reviewed and is accepted. The

terminal disclaimer has been recorded and the previously rejections under the doctrine

of double patenting have been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1, 3-7, 9-13, and 15-19 are rejected under 35 U.S.C. 102(b) as being

anticipated by NCITS, "Fibre Channel Generic Services – 3, Rev. 7.01," November,

2000 (hereinafter NCITS).

As per claims 1, 3, 7, and 13, NCITS discloses a fibre channel security

arrangement wherein CTIUs are transmitted between two nodes in a Fibre Channel

network (see Section 4.3, first paragraph). The CTIU that is transmitted by or received

at any node must be processed according to this standard. Encryption of bulk data (see

section 9.1.1.1.3) is used according to preamble values that must be identified (see

sections 9.1.1.4 and 9.1.1.5). The information is used to fetch algorithm key information

from key server databases, which contain security information, including key

information, for each client, including the source and destination (security databases)

(see section 9.1.2).

As per claims 4 and 10, NCITS discloses several encryption algorithms including

DES (see section 9.1.1.5).

As per claim 5, NCITS discloses both authentication of a CTIU (see section

9.1.1.1.4), Authentication Hash Block and confidentiality through encryption of bulk data

(see section 9.1.1.1.3). The receiver must necessarily recognize both functionalities.

The retrieved key from the security database, described, above, is used for

authentication.

As per claim 6, NCITS discloses support for endpoints that are domain

controllers (see section 6.1.2.1.4) and N_Ports (see section 4.3.1.4).

As per claims 9 and 11, NCITS additionally discloses the use of Extended CT_IU

preambles with Authentication Hash Blocks (see section 4.3.2).

As per claim 12, NCITS discloses the padding of data before encryption (see

Appendix A.6, first bullet point).

Regarding claim 15, the use of authentication data such as NCITS' hashes

confirms that a transmission has not been subject to tampering.

Regarding claims 16-19, in order for a program to be executed on a client or

server, it must be, at some point, embodied on a machine-readable medium.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 2, 8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over "Fibre Channel Generic Services – 3, Rev. 7.01, November, 2000" as applied to

claims 1, 7, and 13 above, and further in view of U.S. Patent No. 6,061,794 to Angelo.

NCITS does not sate whether or not mutual authentication between clients is

necessary before the key server creates its entries.

.   Angelo discloses mutual authentication at initialization time and a subsequent

creation and storing of per node rules in the appropriate location in order to prevent a

remote device from masquerading as a local device and thereby avoid authorization

checks performed during run-time operation (see abstract and column 7, lines 1-19 and

28-38).

Therefore, it would be obvious to one of ordinary skill in the art at the time the

invention was made to modify the invention of NCITS by performing mutual

authentication at initialization time and a subsequent creation and storing of per node

rules in the key server, in order to prevent a remote device from masquerading as a

local device and thereby avoid authorization checks performed during run-time

operation.

Response to Arguments

7.   Applicant's arguments filed 12 March 2007 have been fully considered but they

are not persuasive. In the examination of a patent application, the meanings of claim

terms are given their broadest reasonable interpretation in light of Applicant's

specification. See *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir.

2000), *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-17 (Fed. Cir. 2005) (en banc).

Based upon the description of security databases in Applicant's specification (see figure

2 and p. 9, lines 14-29), there is no reason why the database being described in NCITS

does not constitute a "security database." Since Applicant's specification does not use

the term "key database," there is no reason why the NCITS constitutes such a structure

as opposed to a security database. Though a key does not identify an encryption

algorithm per se, the distribution_encryption_id field is clearly being used for that

purpose. Regarding Applicant's argument that the NCITS database is not a CT_IU

database because it is being used for key distribution, it is noted that keys are

distributed in NCITS using types of CT_IU packets (see section 9.1.3); therefore, the

database is being used for CT_IU transmissions.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Matthew E. Heneghan, whose telephone number is

(571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30

AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kambiz Zand, can be reached at (571) 272-3811.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450
Or faxed to:
(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (571) 272-

2100.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

                                        /Matthew Heneghan/

May 21, 2007   Patent Examiner (FSA), USPTO Art Unit 2134